



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/631,224	08/02/2000	Alan P. Stevens	GB9-2000-0047-US1	9117
25259	7590	06/21/2005	EXAMINER	
IBM CORPORATION 3039 CORNWALLIS RD. DEPT. T81 / B503, PO BOX 12195 REASEARCH TRIANGLE PARK, NC 27709			HO, ANDY	
			ART UNIT	PAPER NUMBER
			2194	

DATE MAILED: 06/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/631,224

Applicant(s)

STEVENS, ALAN P.

Examiner

Andy Ho

Art Unit

2194

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 22-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 22-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

RD

### DETAILED ACTION

1. This action is in response to the amendment filed 4/6/2005.
2. Claims 1 and 22-25 have been examined and are pending in the application.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klemm U.S Patent No. 6,457,142 in view of Guthrie U.S Patent No. 6,385,661, and further in view of Doucette U.S Patent No. 6,356,559.

**As to claim 1**, Klemm teaches an apparatus for providing application execution data (JAS transmits the thread and target application program status, line 32-33 column 11) to a profiling agent (to the remote manager, lines 33-34 column 11) on a remote system (remote manager 205 resides on a different machine, line 67 column 11 to line 1 column 12) as requested by said agent (the remote manager request status information on the target application program, lines 9-11 column 2), wherein a first application (Java Virtual Machine 208, Fig. 2) generates said application execution data (the thread and target application program status, line 32-33 column 11) comprising

Art Unit: 2194

receiving a request (the remote manager request status information on the target application program, lines 9-11 column 2) via a network interface (remote manager and JAS communicate via TCP/IP, line 67 column 11 to line 2 column 12) from the profiling agent (remote manager, lines 33-34 column 11) for the data (the thread and target application program status, line 32-33 column 11);

requesting (JVMPI 212 communicates with Java Virtual Machine 208, Fig. 2) the data (the thread and target application program status, line 32-33 column 11) from the first application (Java Virtual Machine 208, Fig. 2) via a local interface (JVMJI 212, Fig. 2);

receiving (the events are being notified to the supervisor agent 202 via JVMJI 212, lines 28-30) the data (the thread and target application program status, line 32-33 column 11) from the first application (Java Virtual Machine 208, Fig. 2) via the local interface (JVMJI 212, Fig. 2);

transmitting the data to the profiling agent (the supervisor agent 202 sends signals to the remote manager 205, lines 35-45 column 15; JAS transmits the thread and target application program status to the remote manager, line 32-34 column 11) via the network interface (remote manager and JAS communicate via TCP/IP, line 67 column 11 to line 2 column 12)

wherein the network interface (TCP/IP, line 67 column 11 to line 2 column 12) allows receipt of controls from the profiling agent (remote manager, lines 33-34 column 11) for controlling the operation of the apparatus (the remote manager initiate target application program supervision actions on its own, lines 9-12 column 2).

Klemm does not explicitly teach exposing all the functionality, and switching between synchronous and asynchronous transmission of the data.

Guthrie teaches a client/server system (Fig. 1) in which a local interface's functionality (interface and methods of subject object 18, lines 10-11 column 4) being exposed to an agent (remote proxy object 22 has an interface and list of methods identical to subject object 22, lines 9-11 column 4) on a remote system (client 14, Fig. 1). It would have been obvious to apply the teachings of Guthrie to the system of Klemm because the agent can communicate with the interface locally.

Doucette teaches a system of data transmitting (Fig. 1) wherein the system can switch from transmitting synchronous packets to transmitting asynchronous packets (lines 9-14 column 11). It would have been obvious to apply the teachings of Doucette to the system of Klemm because this allows the data to be transmitting to the agent within a timely fashion.

**As to claim 24**, it is a method claim of claim 1. Therefore, it is rejected for the same reasons as claim 1 above.

4. Claims 22 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klemm in view of Guthrie, and further in view of Benson U.S Patent No. 6,202,085.

**As to claim 22**, Klemm teaches an apparatus for providing application execution data (JAS transmits the thread and target application program status, line 32-33 column 11) to a profiling agent (to the remote manager, lines 33-34 column 11) on a remote system (remote manager 205 resides on a different machine, line 67 column 11 to line 1

Art Unit: 2194

column 12) as requested by said agent (the remote manager request status information on the target application program, lines 9-11 column 2), wherein a first application (Java Virtual Machine 208, Fig. 2) generates said application execution data (the thread and target application program status, line 32-33 column 11) comprising

receiving a request (the remote manager request status information on the target application program, lines 9-11 column 2) via a network interface (remote manager and JAS communicate via TCP/IP, line 67 column 11 to line 2 column 12) from the profiling agent (remote manager, lines 33-34 column 11) for the data (the thread and target application program status, line 32-33 column 11);

requesting (JVMPI 212 communicates with Java Virtual Machine 208, Fig. 2) the data (the thread and target application program status, line 32-33 column 11) from the first application (Java Virtual Machine 208, Fig. 2) via a local interface (JVMJI 212, Fig. 2);

receiving (the events are being notified to the supervisor agent 202 via JVMJI 212, lines 28-30) the data (the thread and target application program status, line 32-33 column 11) from the first application (Java Virtual Machine 208, Fig. 2) via the local interface (JVMJI 212, Fig. 2);

transmitting the data to the profiling agent (the supervisor agent 202 sends signals to the remote manager 205, lines 35-45 column 15; JAS transmits the thread and target application program status to the remote manager, line 32-34 column 11) via the network interface (remote manager and JAS communicate via TCP/IP, line 67 column 11 to line 2 column 12)

wherein the network interface (TCP/IP, line 67 column 11 to line 2.column 12) allows receipt of controls from the profiling agent (remote manager, lines 33-34 column 11) for controlling the operation of the apparatus (the remote manager initiate target application program supervision actions on its own, lines 9-12 column 2).

Klemm does not explicitly teach exposing all the functionality and two connections for transmitting data and controls.

Guthrie teaches a client/server system (Fig. 1) in which a local interface's functionality (interface and methods of subject object 18, lines 10-11 column 4) being exposed to an agent (remote proxy object 22 has an interface and list of methods identical to subject object 22, lines 9-11 column 4) on a remote system (client 14, Fig. 1). It would have been obvious to apply the teachings of Guthrie to the system of Klemm because the agent can communicate with the interface locally.

Benson teaches a system of proving application data (line 7 column 9 to line 53 column 10) having an agent wherein controls and data are being transmitted via two different connections (36 and 57, Fig. 2). It would have been obvious to apply the teachings of Benson to the system of Klemm because this allows the data to be transferred directly, thereby reducing runtime.

**As to claim 25**, it is a method claim of claim 22. Therefore, it is rejected for the same reasons as claim 22 above.

5. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Klemm in view of Doucette, and further in view of Swenson U.S Patent No. 6,574,675.

**As to claim 23**, Klemm teaches an apparatus for providing application execution data (JAS transmits the thread and target application program status, line 32-33 column 11) to a profiling agent (to the remote manager, lines 33-34 column 11) on a remote system (remote manager 205 resides on a different machine, line 67 column 11 to line 1 column 12) as requested by said agent (the remote manager request status information on the target application program, lines 9-11 column 2), wherein a first application (Java Virtual Machine 208, Fig. 2) generates said application execution data (the thread and target application program status, line 32-33 column 11) comprising

receiving a request (the remote manager request status information on the target application program, lines 9-11 column 2) via a network interface (remote manager and JAS communicate via TCP/IP, line 67 column 11 to line 2 column 12) from the profiling agent (remote manager, lines 33-34 column 11) for the data (the thread and target application program status, line 32-33 column 11), the application execution data comprises events (events, line 11 column 5);

requesting (JVMPI 212 communicates with Java Virtual Machine 208, Fig. 2) the data (the thread and target application program status, line 32-33 column 11) from the first application (Java Virtual Machine 208, Fig. 2) via a local interface (JVMJI 212, Fig. 2);

receiving (the events are being notified to the supervisor agent 202 via JVMJI 212, lines 28-30) the data (the thread and target application program status, line 32-33 column 11) from the first application (Java Virtual Machine 208, Fig. 2) via the local interface (JVMJI 212, Fig. 2);



transmitting the data to the profiling agent (the supervisor agent 202 sends signals to the remote manager 205, lines 35-45 column 15; JAS transmits the thread and target application program status to the remote manager, line 32-34 column 11) via the network interface (remote manager and JAS communicate via TCP/IP, line 67 column 11 to line 2 column 12). Klemm does not explicitly teach a buffer and timestamp.

Doucette teaches a system of data transmitting (Fig. 1) wherein the system can switch from transmitting synchronous packets to transmitting asynchronous packets (lines 9-14 column 11) and a buffer for storing the data (synchronous data in buffers, line 11 column 6). It would have been obvious to apply the teachings of Doucette to the system of Klemm because this allows the data to be transmitting to the agent within a timely fashion.

Swenson teaches each event object contains timestamp (lines 29-30 column 10), the event is synchronous (synchronous communication interface, line 16 column 2) and switching to synchronous transmission responsive to receipt of a synchronous event (lines 13-21 column 2). It would have been obvious to apply the teachings of Swenson to the system of Klemm because this provides the completion time of the sent data; therefore, the sender of the data would be informed when the transmitted event was completed.

### ***Response to Arguments***

6. Applicant's arguments filed 4/6/2005 have been fully considered but they are not persuasive.

Applicant argued that the combination of the Klemm and Doucette references was improper since Doucette reference discloses in a different environment from Klemm's environment (Remarks, fifth paragraph page 6 to third paragraph page 7). In response, while this may be true it does not preclude using Doucette in the claim rejections.

Applicant argued that Doucette reference does not teach switching based on controls received from a remote system (Remarks, fourth paragraph page 7 to third complete paragraph page 8). In response, Klemm reference was used to teach this limitation as disclosed in the claim rejection above, not Doucette reference. Klemm teaches the network interface (TCP/IP, line 67 column 11 to line 2 column 12) allows receipt of controls from the profiling agent (remote manager, lines 33-34 column 11) for controlling the operation of the apparatus (the remote manager initiate target application program supervision actions on its own, lines 9-12 column 2). The reference meets the limitation as claimed.

Applicant argued that Benson reference does not teach: "controls flow on one connection toward...another connection" (Remarks, first paragraph page 9). In response, Klemm reference was used to teach this limitation as disclosed in the claim rejection above, not Benson reference. Klemm teaches the network interface (TCP/IP, line 67 column 11 to line 2 column 12) allows receipt of controls from the profiling agent (remote manager, lines 33-34 column 11) for controlling the operation of the apparatus

Art Unit: 2194

(the remote manager initiate target application program supervision actions on its own, lines 9-12 column 2); transmitting the data to the profiling agent (the supervisor agent 202 sends signals to the remote manager 205, lines 35-45 column 15; JAS transmits the thread and target application program status to the remote manager, line 32-34 column 11) via the network interface (remote manager and JAS communicate via TCP/IP, line 67 column 11 to line 2 column 12). The reference meets the limitation as claimed.

Applicant argued that Swenson reference does not teach switching to an interface if a synchronous event is recorded (Remarks, third paragraph page 9). In response, applicant is arguing limitation not brought out in the claim.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Art Unit: 2194

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andy Ho whose telephone number is (571) 272-3762. A voice mail service is also available for this number. The examiner can normally be reached on Monday – Friday, 8:30 am – 5:00 pm.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2100.

Any response to this action should be mailed to:

Commissioner for Patents

P.O Box 1450

Alexandria, VA 22313-1450

Or fax to:

- AFTER-FINAL faxes must be signed and sent to (703) 872 - 9306.
- OFFICAL faxes must be signed and sent to (703) 872 - 9306.
- NON OFFICAL faxes should not be signed, please send to (571) 273 – 3762

A.H  
June 20, 2005

  
MENG-AL T. AD  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100